

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims**

1-68. (Cancelled)

69. (Previously presented) An individual single-walled carbon nanotube synthesized on a substrate, wherein the nanotube has a length of at least 1 mm from one end to an opposite end of the individual nanotube.

70. (Previously presented) The nanotube of claim 69 wherein the nanotube has a length greater than 2000 microns.

71. (Previously presented) The nanotube of claim 69 wherein the nanotube has a length greater than 1 cm.

72. (Cancelled)

73. (Previously presented) The nanotube of claim 69 wherein the nanotube is made by a process comprising:

providing a catalyst on a substrate; and  
directing a feeding gas in a predetermined direction over the catalyst such that the nanotube grows from the catalyst in the predetermined direction.

74. (Previously presented) The nanotube of claim 69 wherein the nanotube comprises one of a plurality of substantially aligned carbon nanotubes, each having a length of at least 2000 microns.

75. (Previously presented) The nanotube of claim 74 wherein each of the plurality of substantially aligned carbon nanotubes is substantially isolated from the other nanotubes.

76. (Previously presented) The nanotube of claim 69 wherein the nanotube is located in a crossed network array of carbon nanotubes, each having a length of at least 2000 microns.

77. (Previously presented) The nanotube of claim 69 wherein the nanotube comprises multiple metal electrodes on the nanotube.

78. (Previously presented) The nanotube of claim 69 further comprising multiple devices along the length of the nanotube.

79. (Previously presented) A system comprising an individual single-walled carbon nanotube and multiple transistor or diode devices along the length of the nanotube, wherein the nanotube has a length of at least 1 mm from one end to an opposite end of the individual nanotube.

80. (Previously presented) The system of claim 79 wherein the nanotube has a length of at least 2000 microns.

81. (Cancelled)

82. (Previously presented) The system of claim 79 wherein the nanotube has a length greater than 1 cm.

83-88. (Cancelled)

89. (Previously presented) The system of claim 79 further comprising a substrate which supports at least one end of the nanotube.

90. (Previously presented) The system of claim 79 further comprising a metal catalyst nanoparticle in contact with at least one end of the nanotube.

91. (Previously presented) The system of claim 69 wherein the substrate supports at least one end of the nanotube.

92. (Previously presented) The system of claim 69 further comprising a metal catalyst nanoparticle in contact with at least one end of the nanotube.